useful commands

- which, whereis

- env

su -- a word of wisdom

- root: su and sudo

  - motivation for root

  - motivation for not having root

- su

- sudo

Starting Linux

- Hardware self diagostics

- Linux kernel loaded from /*boot* directory of root device

- Kernel starts running and initializes itself

- Kernel starts process *init*

  - pid = 1

  - first user process

Run Levels

- Linux kernel can run in different ways, defined by *run levels*.

  - 10 levels define desired state of the system

- view /etc/inittab   (sidenote: what is the difference vi != view)

  - This file describes how the INIT process should set up the system in a certain run-level.

Run Levels

- from inittab:

Default runlevel. The runlevels used by RHS are:

0 - halt (Do NOT set initdefault to this)

1 - Single user mode

2 - Multiuser, without NFS

   (The same as 3, if you do not have networking)

3 - Full multiuser mode

4 - unused

5 - X11

6 - reboot (Do NOT set initdefault to this)

init process

- *init* process

  - first user process

  - parent to all processes

  - init starts other programs

  - controls run level and *boot script* associated with each run level

Boot Scripts

- scripts:

  - *src.sysinit*

  - *rc.boot*

  - *rc.modules*

  - *rc.local*

- scripts for different run levels located in /etc/rc.d

  - take a look

Stopping Linux

- Pull the plug?   @#$%^!!!

- shutdown

- halt

- sync - flush file system buffer